Sub-Metering Provides Savings of Over $170,000 Annually

Honolulu strives to provide its residents and visitors with excellent service, while making sure taxpayer money is well spent. Water Management, Inc.’s (WMI) reputation as a leading water conservation company led the City to subcontract WMI to find unique ways to decrease the annual water expense of several government buildings. Outside standard domestic water conservation measures, WMI found a unique solution with an exceptional payback.

Seven of the ten buildings audited were using water-cooled cooling towers to lower the water temperature coming from the chiller units. These facilities were being charged for both water and sewer consumed by the cooling towers. WMI learned the utility provider offered a sewer credit on this water, as most of the tower water was evaporating into the atmosphere and not discharged into the sewer system.

WMI proposed sub-metering the tower supply and blow-down lines, allowing the client to eliminate the sewer charge on water lost to drift and evaporation. This reduced the charge for tower water from $10.10 to $2.36 per thousand gallons – a considerable savings.

This measure saves the City of Honolulu over $170,000 (23 million gallons of sewer charges) per year. When combined with the recommended domestic water and energy conservation measures, the payback of this project was about 3 years.